

Specifications

Frequencies		UHF1: 400-470MHz; UHF2: 450-520MHz UHF3: 350-400MHz; VHF: 136-174MHz
Channel Capacity		16
Channel Spacing		12.5KHz/20KHz/25KHz
Operating Voltage		13.6V ± 15%
Channel Capacity	Standby	<0.8A
	Transmit	<11A
Frequency Stability		± 0.5ppm
Antenna Impedance		50 Ω
Duty Cycle		100%
Dimensions (H x W x D)		88 X 483 X 366 mm
Weight		8.5Kg
LCD Display		220*176 pixels, 262000 colors; 2.0 inch, 4 rows
Sensitivity	Analog	0.3 μV (12dB SINAD); 0.22 μV (Typical) (12dB SINAD); 0.4 μV (20dB SINAD)
	Digital	0.3uV/BER5%
Adjacent Channel Selectivity		
TIA-603	ETSI	65dB @ 12.5KHz ; 75dB @ 20/25KHz 65dB @ 12.5KHz ; 75dB @ 20/25KHz
Intermodulation		
TIA-603	ETSI	75dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz
Spurious Response Rejection		
TIA-603	ETSI	80dB @ 12.5/20/25KHz 80dB @ 12.5/20/25KHz
Blocking		
TIA-603	ETSI	90dB 90dB
Hum and Noise		40dB@12.5KHz 43dB@20KHz 45dB@25KHz
Rated Audio Power Output		0.5W
Rated Audio Distortion		≤3%
Audio Response		+1 ~ -3dB
Conducted Spurious Emission		<-57dBm

General

Receiver

Transmitter	RF Power Output	5-50W
	FM Modulation	11K0F3E @ 12.5KHz; 14K0F3E @ 20KHz; 16K0F3E @ 25KHz
	4FSK Digital Modulation	12.5KHz Data Only: 7K60FXD; 12.5KHz Data & Voice: 7K60FXW
	Conducted/Radiated Emission	-36dBm <1GHz; -30dBm >1GHz
	Modulation Limiting	± 2.5KHz @ 12.5KHz; ± 4.0KHz @ 20KHz; ± 5.0KHz @ 25KHz
	FM Hum & Noise	40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz
	Adjacent Channel Power	60dB @ 12.5KHz; 70dB @ 20/25KHz
	Audio Response	+1 ~ -3dB
	Audio Distortion	≤3%
	Digital Vocoder Type	AMBE++ or SELP
	Digital Protocol	ETSI-TS102 361-1,-2,-3

Environmental Specifications	
Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C

All Specifications are tested according to applicable standards, and subject to change without notice due to continuous development.

Standard Accessories

Power Cord

Optional Accessories



Pictures above are for reference only and may vary from actual products.



Hytera Communications Corporation Limited

Address: HYT Tower, Hi-Tech Industrial Park North, Beihuan Rd., Nanshan District, Shenzhen, China
Tel: +86-755-2697 2999 Fax: +86-755-8613 7139 Post: 518057
Http://www.hytera.com Stock Code: 002583.SZ

Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.

HYT, Hytera are registered trademarks of Hytera Co., Ltd. © 2012 Hytera Co., Ltd. All Rights Reserved.

EN2012056

www.hytera.com



RD98X

Powerful Digital Repeater



Hytera Communications Corporation Limited



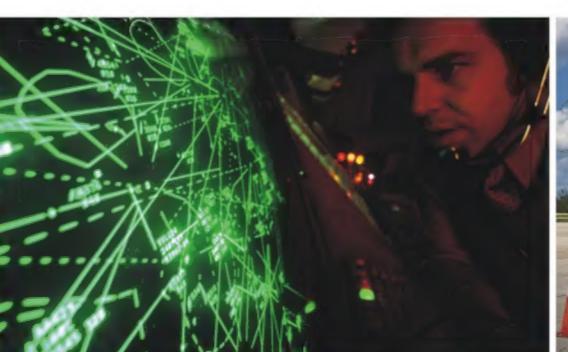
As a professional repeater built to the DMR standard, RD98X integrates user concerns and actual requirements. Powerful digital feature, remarkable service quality and considerate ergonomic design - It will refresh your communication experience!

Applications

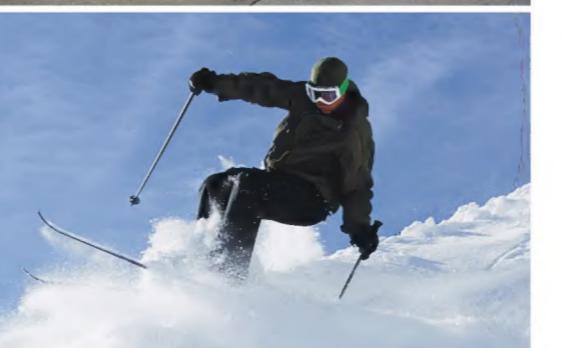
Public Safety
Energy and Forestry



Utility
Business



Transportation
Sports



Product Features

Smart Digital-Analog Switch

This repeater supports digital and analog modes. It can smartly select the right one based on the type of received signal, allowing you to enjoy digital delights with ease.

Advanced TDMA Technology

The application of Time Division Multiple Access (TDMA) technology greatly enhances spectrum efficiency, which allows twice the user compared with that of traditional FDMA. Obviously, this can not only save your cost in base station and frequency license, but also relieve the pressure of increasing shortage in spectrum resources.

Outstanding Heat Dissipation

The unique cooling design combining a built-in heat pipe and a temperature-controlled fan ensures quick heat dissipation, enabling the repeater to work normally even with full power.

Handy Management Service

With the management software, you can remotely monitor and diagnose a repeater. In addition, you can either record or play back the audio freely in digital mode.

Innovative LED Design

The innovative LED and the 2.0 " HD color display would deliver you the repeater status clearly, as well as a pleasing visual experience.

Accessory Expansion

RD98X supports third party to develop accessories expansion via front and rear port of the Repeater. This is achieved via the signal streaming and pin control through the repeater ports.

Main Functions

Repeater Diagnostic And Control (RDAC)

RD98X supports Remote (via IP port to connect to internet) and Local diagnostic (via USB) PC applications to monitor, diagnose and control the repeater status, thus increasing the maintenance efficiency. *Hytera's developed RDAC is able to support multiple master network connection to allow radio administrator to monitor multiple radio network upcoming!

Dual Slot Digital Audio Streaming

RD98X supports streaming of both the voice slots via the rear port accessory pins, allowing third party for capability expansion.

Analog Digital Autoswitch

RD98X supports Analog and Digital channel auto switching, allowing efficient frequency sharing between Analog and Digital users during the digital migration.

IP Multi-site Connect

RD98X supports network interconnect via the IP port of repeater to form a private radio network, allowing wide area coverage to meet dispersed locations data and voice communications.

50W High Power

RD98X supports maximum repeating power of 50W, and thus increasing the system coverage with lesser setup equipments.

16 Channels

RD98X supports maximum of 16 channels, allowing efficient radio network control at different scenarios. The channel change can be performed either via RDAC PC tools, via the repeater's front panels channel knob and via the channel steering from the repeater's rear port.

Analog/Digital Operating Mode

RD98X supports operating mode of Analog and Digital.

Analog/Digital Back-to-Back Interconnect

RD98X supports different operating mode of Analog and Digital to interconnect for voice cross patch, allowing Analog users to communicate to the Digital users and vice versa. This has allowed the smooth migration for Analog users to the digital world!

Analog Repeater Knockdown

RD98X supports repeater knockdown, that when activated via the repeater's rear accessory pin, will disabled the transmit path of the repeater.

Multi CTCSS/CDCSS Decode

RD98X supports decoding up to maximum of 16 CTCSS/CDCSS in Analog channels, allowing repeating of different Analog voice users from various groups.

Analog Scan

RD98X supports Analog voice and signaling scan, allowing repeating of different Analog voice users from various groups.

Repeater Access Management

RD98X supports radio users access control to the repeater, allows better security to prevent un-authorized users from accessing the radio network.

Analog/Digital Telephone Interconnect (via DTMF signaling)

RD98X supports simplex voice communications between radio and telephone users. It allows a radio user to make a telephone call; or a telephone user to make either a Group or Private call to radio users. This feature utilizes the Commercial Off The Shelf (COTS) Analog Phone Patch boxes and a Plain Old Telephone Service (POTS) line to connect the Repeater to the Corporate Office Phone System (PBX) or Public Switched Telephone Network (PSTN).

Continuous Wave Identification (CWID)

RD98X supports Analog transmission of the repeater identification in Morse code format.

* indicates functions available in later version.

Notes: RD98X, X=0, 2, 5 or 8, model number varies geographically. For details, please contact our regional sales representatives.